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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,859	10/19/2001	Yingwei Chen	US 010534	4951

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EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT PAPER NUMBER

2613

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/082,859

Applicant(s)

CHEN ET AL.

Examiner

Andy S. Rao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/01/2003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Adolph et al., (hereinafter referred to as "Adolph").

Adolph discloses an optimization system for processing encoded video data (Adolph: figure 5), comprising: a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames (Adolph: column 3, lines 30-35); and a system for identifying a skippable region in the overlaid area (Adolph: column 3, lines 55-60), as in claim 1.

Regarding claim 2, Adolph disclose wherein the frame analysis system examines a picture type of the current video frame, and wherein the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture (Adolph: column 1, lines 48-60).

Regarding claim 3, Adolph discloses wherein the frame analysis system examines a sequence of video frames, and wherein the identification system identifies the entire overlaid area as the skippable region if none of the sequence of video frames acts as reference frames (Adolph: column 3, lines 1-15).

Regarding claims 4-5, Adolph discloses a motion vector analysis system that calculates a motion vector range for the current video frame (Adolph: column 3, lines 60-65), as in the claims.

Regarding claims 6-8, Adolph discloses a motion vector analysis system that examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame (Adolph: column 3, lines 60-65), as in the claims.

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Regarding claim 9, Adolph further comprising a system for examining side information in the encoded video data (Adolph: column 3, lines 35-40).

Regarding claim 10, Adolph discloses wherein the frame analysis system determines a plurality of predicted frames that reference the current video frame (Adolph: column 3, lines 30-35); wherein the identification system identifies a plurality of skippable regions, and wherein a final skippable region is determined as a cross set of each of the identified skippable regions (Adolph: column 3, lines 54-65).

Regarding claim 11, Adolph further discloses a decoder for decoding the encoded video data (Adolph: column 3, lines 14-20), as in the claim.

Regarding claims 12-13, Adolph discloses wherein the skippable region is utilized by a component of the decoder to reduce computational complexity (Adolph: column 4, lines 15-20), as in the claims.

Adolph discloses a program product, stored on a recordable medium, that when executed processes encoded video data, the program product (Adolph: column 4, lines 20-25), comprising: means for determining if a current video frame having an overlaid area acts as a reference for future video frames (Adolph: column 3, lines 30-35); and means for identifying a skippable region in the overlaid area (Adolph: column 3, lines 35-40), as in claim 14.

Regarding claims 15-16, Adolph discloses means for calculating a motion vector range for a predicted frame that references the current video frame (Adolph: column 3, lines 60-65), as in the claims.

Regarding claims 17-18, Adolph discloses means for examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame (Adolph: column 3, lines 60-65), as in the claims.

Regarding claim 19, Adolph discloses means for examining side information in the encoded video data (Adolph: column 3, lines 35-40).

Adolph discloses a method of processing encoded video data (Adolph: column 4, lines 35-55), comprising the steps of: determining if a current video frame having an overlaid area acts as a reference for future video frames (Adolph: column 3, lines 30-35); and identifying a skippable region in the overlaid area (Adolph: column 3, lines 55-60), as in claim 20.

Regarding claim 21, Adolph discloses calculating a motion vector range for a predicted frame that references the current video frame (Adolph: column 3, lines 60-65); and identifying the skippable region as comprising the overlaid area less an area defined by the motion vector range (Adolph: column 4, lines 1-5), as in the claim.

Regarding claim 22, Adolph discloses examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame (Adolph: column 3, lines 60-65); and identifying the skippable region as comprising the overlaid area less the prediction macroblocks identified in the overlaid area (Adolph: column 4, lines 1-6), as in the claim.

Regarding claims 23-24, Adolph discloses examining side information in the encoded video data (Adolph: column 3, lines 35-40), as in the claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wee discloses an image sequence compression featuring independently coded regions. Conklin discloses a system and method for generating video frames and correcting motion.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (703)-305-4813. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris S. Kelley can be reached on (703)-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andy S. Rao
Primary Examiner
Art Unit 2613

ANDY RAO
PRIMARY EXAMINER

asr
August 30, 2004